## ABSTRACT

A tire manufacturing method includes the steps of, when a green tire is molded, moving a toroidally expandable toroidal molding drum through a distance between a plurality of working stations at a specified tact time, disposing a carcass band and both bead cores on the drum in any working station and locking the bead cores, increasing the diameter of the molding drum, toroidally extending the carcass band between both bead cores, and rolling up the side portion of the carcass band around the bead cores in the outer radial direction, assembling tire component members with the bead cores locked to the toroidal molding drum and molding the green tire, and reducing the diameter of the molding drum, unlocking the bead cores, and removing the green tire from the molding drum, whereby the tires of a plurality of sizes can be sequentially molded, a conventional tire structure must not be largely changed, and an energy and time can be prevented from being wastefully consumed.